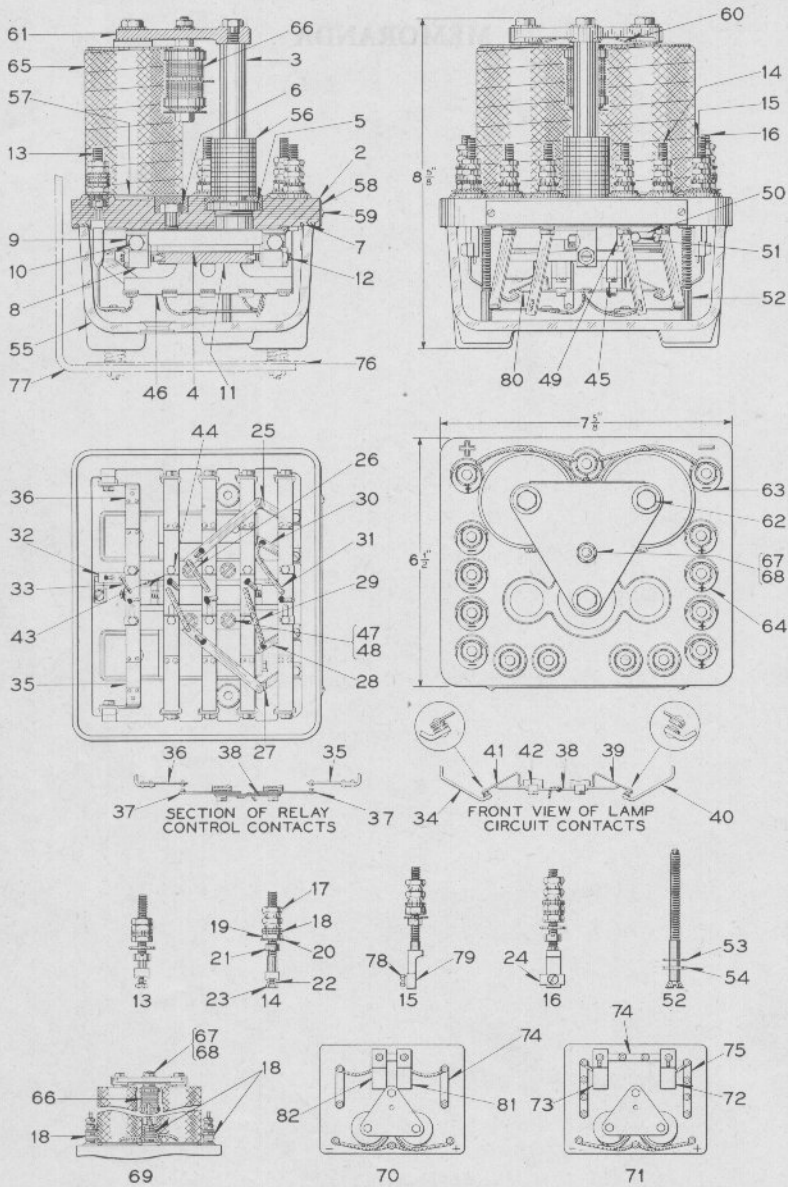




Style "FN-16A" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

Zachary C. Gillihan 2008

Style "FN-16A" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

For complete Relays refer to Plate E-5051.

Order by Plate, Piece, Reference and Abbreviated
Description Given in Heavy Face Type Only

Piece	Ref.	Description	Drawing Reference
103884	2	Top Plate Only (Without Cores).....	C-9356-4
257700	3	Three Repair Cores (All three cores should be replaced as the repair cores are ground to close tolerances in height).....	8101-347
265733	4	Center Pole Piece Only.....	8250-134
104169	5	Nut.....	8265-356
	6	Tap Bolt, $\frac{3}{8}$ "-16x $\frac{7}{8}$ " Hex. Hd. S. (Tin Pl.)	
171503	7	Gasket.....	8078-1510
265736	8	Armature Bracket.....	8303-138
219875	9	Bolt Lock.....	7828-138
266121	10	Screw.....	8098-256
265694	11	Armature Complete.....	8157-443
199626	12	Trunnion Screw Complete (Inc. 1-12a and 1-12b) ..	12471-20
100402	12a	Trunnion Screw Only.....	8378-375
535	12b	Nut.....	8109-1
266649	13	Terminal Post with Nuts and Washers (Inc. 1-13a, 3-18, 3-19, 1-20, 1-21, 1-22 and 1-23).....	12451-394
158035	13a	Terminal Post Only, for Refs. 13 and 14.....	8094-2125
170896	14	Terminal Post with Nuts and Washers (Inc. 1-13a, 2-17, 2-18, 1-19, 1-20, 1-21, 1-22 and 1-23).....	12451-239
	15	Terminal Post with Nuts and Washers (Inc. 1-15a, 2-17, 3-18, 1-19, 1-20, 1-21, 1-24, 1-78 and 1-79)....	12451-
103977	15a	Terminal Post Only, for Refs. 15 and 16.....	8094-2377
266650	16	Terminal Post with Nuts and Washers (Inc. 1-15a, 2-17, 5-18, 2-19, 1-20, 1-21, 1-23 and 1-24).....	12451-394
29101	17	Nut.....	8109-193
29102	18	Washer.....	7828-139

PLATE E-5065

UNION SWITCH & SIGNAL CO.

Style "FN-16A" 4N-4R and 2N-2R D. C. Flasher Relays Detail Parts

For complete Relays refer to Plate E-5051.

(Continued)

Order by Plate, Piece, Reference and Abbreviated
Description Given in Heavy Face Type Only

Piece	Ref.	Description	Drawing Reference
29103	19	Nut	8109-194
69705	20	Washer	7828-287
72948	21	Nut	8109-383
134516	22	Screw Lock	8486-368
62977	23	Screw	8098-845
210763	24	Screw Lock	8486-405
104067	25	L.H. Connector with Flexible Connector (For 4N-4R Relay)	8064-846
104066	25a	L.H. Connector without Flexible Connector	8064-846
137945	26	Flexible Connector for Refs. 25 and 27	10934-147
104065	27	R.H. Connector with Flexible Connector (For 4N-4R Relay)	8064-846
104064	27a	R.H. Connector without Flexible Connector	8064-846
104072	28	R.H. Connector with Flexible Connector (For 2N-2R and 4N-4R Relays)	8064-851
104071	28a	R.H. Connector without Flexible Connector	8064-851
135276	29	Flexible Connector for Ref. 28	10934-147
104074	30	L.H. Connector with Flexible Connector (For 2N-2R and 4N-4R Relays)	8064-851
104073	30a	L.H. Connector without Flexible Connector	8064-851
210822	31	Flexible Connector for Ref. 30	10934-147
171513	32	Connector with Flexible Connector (For 2N-2R and 4N-4R Relays)	8064-766
171512	32a	Connector without Flexible Connector	8064-766
209752	33	Flexible Connector for Ref. 32	10934-100
264181	34	Lamp Terminal Post Complete	8094-2482

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UNION SWITCH & SIGNAL CO.

PLATE **E-5065**

Style "FN-16A" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

For complete Relays refer to Plate E-5051.

(Continued)

Order by Plate, Piece, Reference and Abbreviated
Description Given in Heavy Face Type Only

Piece	Ref.	Description	Drawing Reference
104051	35	R.H. Operating (Control) Contact Spring Complete (For 2N-2R and 4N-4R Relays)	8385-2583
104053	36	L.H. Operating (Control) Contact Spring Complete (For 2N-2R and 4N-4R Relays)	8385-2583
104003	37	Contact Spring	8385-2580
104033	38	Connector	8064-850
264185	39	Contact Spring Complete	8385-2852
264182	40	Lamp Terminal Post Complete	8094-2482
264184	41	Contact Spring Complete	8385-2582
150140	42	Lock Washer	8486-367
171092	43	Screw Lock	8486-405
150166	44	Screw	8098-550
151836	45	Nut for Ref. 44	8109-445
103888	46	Contact Spring Block (5-Way)	9968-1236
	47	Machine Screw, No. 8-36x $\frac{11}{16}$ " Fil. Hd. S. (Tin Pl.)	
	48	Lock Washer, No. 8 S. (Tin Pl.)	
100403	49	Magnetic Shunt	8250-109
199421	50	Bolt Lock	8486-399
199452	51	Screw	8098-1300
	52	Machine Screw, No. 14-24x3 $\frac{3}{8}$ " Flat Hd. S. (Tin Pl.) with Washers Refs. 53 and 54.	
210592	53	Washer	8078-1503
38149	54	Washer	7826-98
171473	55	Glass Case with Ventilator Ref. 55a	C-9356-2
157612	55a	Ventilator for Ref. 55	7318-78

Style "FN-16A" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

For complete Relays refer to Plate E-5051.

(Continued)

Order by Plate, Piece, Reference and Abbreviated
Description Given in Heavy Face Type Only

Piece	Ref.	Description	Drawing Reference
161195	56	Washer.....	7828-176
168826	57	Washer.....	8078-1499
104091	58	Name Plate for 4N-4R Relays.....	8225-520
104104	58a	Name Plate for 2N-2R Relays.....	8225-521
	59	Screw, No. 4-40x $\frac{1}{4}$ " Rd. Hd. Hardened (Tin Pl.)	
199632	60	Coil Lock.....	8735-784
171090	61	Back Strap.....	8162-241
	62	Cap Screw, $\frac{5}{16}$ "-18x $\frac{3}{4}$ " Hex. Hd. S. (Cad. Pl.)	
142777	63	White Tag (Marked —).....	8988-75
107232	64	Red Tag (Marked +).....	8988-53
156500	65	Coil, 4.5-ohms.....	8133-365
171491	65a	Coil, 200-ohms.....	8133-365
145969	65b	Coil, 500-ohms.....	8133-365
102258	66	Rectifier Complete.....	12746-4
	67	Lock Washer, $\frac{1}{4}$ " Pl. S. (M) (Tin Pl.)	
	68	Jam Nut, $\frac{1}{4}$ "-20 S. Hex. (Tin Pl.)	
102807	69	Parts Necessary to Apply Rectifier to "FN-16A" Flasher Relay (For suppression of radio interference originating in the operating contacts) (Inc. 3-18, 1-66, 1-67 and 1-68).....	C-9357-2
104919	70	Parts Necessary to Apply Condensers to 2N-2R "FN-16A" Flasher Relay (For suppression of radio interference originating in the lamp contacts) (Inc. 2-18, 1-81, 1-82, and 3-74).....	C-9357-7
104918	71	Parts Necessary to Apply Condensers to 4N-4R "FN-16A" Flasher Relay (For suppression of radio interference originating in the lamp contacts) (Inc. 2-18, 1-72, 1-73, 1-74 and 8-75).....	C-9357-6

Style "FN-16A" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

For complete Relays refer to Plate E-5051.

(Continued)

Order by Plate, Piece, Reference and Abbreviated
Description Given in Heavy Face Type Only

Piece	Ref.	Description	Drawing Reference
102786	72	L.H. Condenser Complete for 4N-4R Relays	B-12549-36
102787	73	R.H. Condenser Complete for 4N-4R Relays	B-12549-36
147302	74	Connector	8064-305
47290	75	Connector	8034-305
172590	76	Shelf Type Shock Absorber Complete (For details see Ref. Ea, Plate E-5030)	12404-27
199782	77	Wall Type Shock Absorber Complete (Similar to Ref. Fa, Plate E-5030)	12404-28
131239	78	Screw	8093-845
233321	79	Lock Washer	8486-433
264186	80	Stop Spring	8735-1084
261278	81	L.H. Condenser Complete for 2N-2R Relays	B-12549-36
261279	82	R.H. Condenser Complete for 2N-2R Relays	B-12549-36
268994	83	Material Necessary to Change 2N-2R Style "FN-16" Relay to have same contacts as Style "FN-16A" Relay (Inc. 2-34, 2-39, 2-40, 2-41, 4-78, 4-79, 4-80, 1-84 and 2-85) (Not Shown)	C-9357-7
268993	83a	Material Necessary to Change 4N-4R Style "FN-16" Relay to have same contacts as Style "FN-16A" Relay (Inc. 4-34, 4-39, 4-40, 4-41, 8-56, 8-78, 8-79, 8-80, 1-84 and 2-85) (Not Shown)	C-9357-6
265693	84	Counterweight (To replace counterweight on "FN-16" Armature) (Not Shown)	9672-245
54934	85	Rivet (For attaching Ref. 84 to Armature) (Not Shown)	10301-30